



# SEVERE ACUTE RESPIRATORY SYNDROME

Public Health Guidance for Community-Level Preparedness and Response to Severe Acute Respiratory Syndrome (SARS) Version 2

## Supplement F: Laboratory Guidance

### *Goals*

- Provide the public health community with ready access to high-quality SARS-CoV diagnostics.
- Ensure that SARS-CoV laboratory diagnostics are used safely and appropriately and that results are interpreted appropriately.

### *Key concepts*

- Efficient SARS-CoV diagnostic assays have been developed, but they frequently do not provide a definitive diagnosis early in illness.
- Although the sensitivity of current assays probably cannot be improved significantly, changes in the type, quality, and processing of specimens may improve the ability to detect SARS-CoV infection in patients.
- The majority of SARS-like illnesses will be caused by other respiratory pathogens; rapid and accurate diagnosis of these infections will make it easier to manage community anxiety about SARS-like illnesses.
- The possibility of false-positive and false-negative results with both PCR and serologic assays should always be considered when interpreting results; clear strategies to minimize such possibilities and to confirm test results are essential.

### *Priority activities*

- Improve the ability to detect SARS-CoV infection by optimizing the selection and timing of specimen collection and processing.
- Provide SARS-CoV assays for RT-PCR testing to Laboratory Response Network (LRN) laboratories and for serologic testing to state public health laboratories.
- Distribute proficiency panels and questionnaires to participating laboratories to determine the ability of laboratories to provide valid SARS-CoV diagnostics.
- Provide guidance on laboratory safety for SARS-CoV and other respiratory diagnostic testing and for possible SARS-CoV-containing specimens submitted for other tests.
- Provide guidance for interpreting test results, taking into account the potential for false-positive and false-negative results and the availability of applicable clinical and epidemiologic information.
- Identify surge capacity for laboratory testing in the event of a large SARS outbreak.

For more information, visit [www.cdc.gov/ncidod/sars](http://www.cdc.gov/ncidod/sars) or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (Español), or (866) 874-2646 (TTY)